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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,189	03/30/2004	Minna Myllymaki	59643.00368	3342
32294	7590	12/15/2006	EXAMINER	
SQUIRE, SANDERS & DEMPSEY L.L.P.			PORTIS, SHANTELL L	
14TH FLOOR			ART UNIT	
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TYSONS CORNER, VA 22182			2617	

DATE MAILED: 12/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/812,189	Applicant(s) MYLLYMAKI ET AL.	
	Examiner Shantell Portis	Art Unit 2617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 October 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed July 27, 2006 have been fully considered but they are not persuasive..

Applicant argues that Sonti and Lamb fail to disclose or suggest "providing the network entity with control information indicating at least one limitation on simultaneous registrations by the subscriber or the user," as recited by claims 1, 19 and 32. The applicant further argues that Lamb does not appear to place any limitation on the number of simultaneous registrations. According to Lamb (Col. 4, line 33-Col. 5, line 12), the ULSR 1000 has access to a database 1200 that stores information about subscribers to the networks 1100. Such information includes a list of networks to which a user is authorized to access, thereby providing at least one limitation on simultaneous registrations. The user is only able to simultaneously register with those networks in which the user is authorized to access (Col. 5, lines 13-18).

Based on the above remarks, Lamb taken alone and in reasonable combination with Sonti meets the limitations of the invention as presently claimed. The rejections are set forth below.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made

to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 9, 10, 12, 13, 19, 25-27, 29, 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sonti et al. (Sonti), U.S. Patent No. 6,108,540 in view of Lamb et al. (Lamb), U.S. Patent No. 6,697,620.

Regarding Claims 1, 19, 31 and 32, Sonti discloses a method for controlling registration in a communication system, the method comprising: receiving a registration request for registration of a user relating to a subscriber in a network entity (Col. 6, lines 45-67); providing the network entity with control information indicating at least one limitation (registration will not occur until it is verified that the mobile station is in the region served by the mobile switching center) on registration allowed for the subscriber or the user (Col. 7, lines 56-62); and controlling the registration based on the control information (Col. 7, line 56-Col. 8, line 18).

Sonti fails to disclose providing the network entity with control information indicating at least one limitation on ***simultaneous*** registrations by the subscriber or the user.

In a similar field of endeavor, Lamb discloses a method and system for providing telecommunication services across networks that use different protocols. Lamb further discloses providing the network entity with control information indicating at least one limitation on ***simultaneous*** registrations by the subscriber or the user. (the ULSR 1000 has access to a database 1200 that stores information about subscribers to the networks 1100. Such information includes a list of networks to which a user is

authorized to access, thereby providing at least one limitation on simultaneous registrations. The user is only able to simultaneously register with those networks in which the user is authorized to access; Col. 4, line 33-Col. 5, line 12; Col. 5, lines 13-18 and Col. 7, line 63-Col. 8, line 8).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Sonti according to Lamb to provide simultaneous registrations to allow customers communication services depending on their current geographic location and the service coverage area (Lamb, Col. 2, lines 6-10).

Regarding Claims 9, 10, 25-27 and 29, the combination of Sonti and Lamb discloses the method and communication system according to claims 1 and 19 as described above.

The combination fails to disclose further comprising: storing the control information in a user information storage entity which comprises a home subscriber server with at least one of said at least one limitation regarding simultaneous registrations allowed for subscribers. However, Sonti does mention a HLR and VLR as the home subscriber server that stores the registered subscriber's profile information (Col. 5, lines 13-25). This information is used to determine whether registration will occur based on if the requesting mobile station is in the serving region (limitation) (Col. 7, lines 56-62). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide a means for storing subscriber's information in the network to be readily available when requesting registration.

Regarding Claims 12 and 13, the combination of Sonti and Lamb discloses the method according to claim 9 as described above.

The combination fails to disclose further comprising: sending a request for subscriber information from said network entity to the user information storage entity and wherein the providing comprises providing the control information from the user information storage entity to said network entity. However, Sonti does mention the mobile switching center sending a request for information (Qualification Request) to the home location register (HLR) where the HLR responds with a (Qualification Request Return Result) along with the mobile station's profile data that is used to determine whether registration should occur (Col. 7, lines 25-62). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide a means for a method and communication within a telecommunications system to determine whether mobile stations should be registered.

4. Claims 2 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sonti and Lamb in view of Jonsson, U.S. Patent No. 6,115,613.

Regarding Claim 2, the combination of Sonti and Lamb discloses the method of claim 1 as described above.

However, the combination fails to disclose further comprising: determining that the subscriber comprises at least one other user.

In a similar field of endeavor, Jonsson discloses a system and method for providing telephone service to each member of a group of radio telephone subscribers.

Jonsson further discloses comprising: determining that the subscriber comprises at least one other user (Col. 3, line 59-Col. 4, line 6 and Col. 4, lines 29-36).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Sonti and Lamb according to Jonsson so as to enable a lower communication cost per user than a single subscription for each of the users (Jonsson, Col. 1, lines 46-50).

Regarding Claim 38, the combination of Sonti and Lamb discloses the method of claim 1 as described above.

However, the combination fails to disclose simultaneous registrations by the subscriber or user in relation to one network.

Jonsson discloses simultaneous registrations by the subscriber or user in relation to one network (Col. 3, line 59-Col. 4, line 6 and Col. 4, lines 29-36).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Sonti and Lamb according to Jonsson so as to enable a lower communication cost per user than a single subscription for each of the users (Jonsson, Col. 1, lines 46-50).

5. Claims 3-8, 11, 14, 18, 20, 21, 28, 33 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sonti and Lamb in view of D'Amico et al. (D'Amico), U.S. Patent No. 5,077,790.

Regarding Claims 3-8, 20, and 33, the combination of Sonti and Lamb discloses the method, communication system and network entity according to claims 1, 19 and 32 as described above.

However, the combination fails to disclose further comprising: checking whether at least one of said at least one limitation on simultaneous registrations would be infringed by allowing the registration, further comprising: denying the registration when the checking step shows that at least one of said at least one limitation regarding the simultaneous registrations would be infringed by allowing the registration, further comprising: allowing the registration request when the checking shows that none of the at least one limitation on simultaneous registrations would be infringed by allowing the registration, further comprising: indicating with the control information a number of the simultaneous registrations allowed for the subscriber, further comprising: indicating with the control information a maximum number of the simultaneous registrations allowed for the subscriber and further comprising: indicating with the control information a limitation on a service type allowed for the simultaneous registrations for the subscriber.

In a similar field of endeavor, D'Amico discloses a secure over-the-air registration of cordless telephones. D'Amico further discloses further comprising: checking whether at least one of said at least one limitation on simultaneous registrations would be infringed by allowing the registration (Col. 3, lines 4-27), further comprising: denying the registration when the checking step shows that at least one of said at least one limitation regarding the simultaneous registrations would be infringed by allowing the registration (Col. 3, lines 4-27), further comprising: allowing the registration request when the checking shows that none of the at least one limitation on simultaneous registrations would be infringed by allowing the registration (Col. 3, lines 40-53), further comprising: indicating with the control information a number of the simultaneous



registrations allowed for the subscriber (Col. 3, line 53-Col. 4, line 3), further comprising: indicating with the control information a maximum number of the simultaneous registrations allowed for the subscriber (Col. 3, line 53-Col. 4, line 3) and further comprising: indicating with the control information a limitation on a service type allowed for the simultaneous registrations for the subscriber (Col. 3, line 53-Col. 4, line 3).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Sonti and Lamb according to D'Amico to monitor registrations based on subscriber's credentials or qualifying information and the amount of simultaneous registrations to prevent fraudulent activity.

Regarding Claims 18 and 37, the combination of Sonti and Lamb discloses the method and network entity according to claims 1 and 32 as described above.

However, the combination fails to disclose further comprising: counting means configured to count the simultaneous registrations of the subscriber.

D'Amico discloses further comprising: counting means configured to count the simultaneous registrations of the subscriber (Col. 3, line 63-Col. 4, line 3) (Although not disclosed, it is inherent that D'Amico's invention includes a counting means for determining the number of registrations).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Sonti and Lamb according to D'Amico to provide a means for determining if the maximum number allowed for registration has been reached to provide security measures for fraudulent activity.

Regarding Claims 11, 14, 21, and 28 the combination of Sonti, Lamb and D'Amico discloses the method and communication system according to claims 3 and 20 as described above.

The combination fails to disclose wherein the checking comprises checking in a user information storage entity and wherein the checking comprises checking in the network entity. However, Sonti does mention the checking step comprising performing the check if the mobile station is in the region served by the mobile switching center (Col. 7, line 59-Col. 8, line 18). Therefore, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to provide a faster and convenient means for checking if the registration request should be allowed.

6. Claims 15-17, 22-24, 30, and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sonti and Lamb in view of Herrero et al. (Herrero), U.S. Publication No. 2005/0009520.

Regarding Claims 15-17, 22-24, and 34-36, the combination of Sonti and Lamb discloses the method, communication system, and network entity according to claims 1, 19 and 32 as described above.

However, the combination fails to disclose wherein said receiving comprises receiving the registration request in at least one of a serving controller, an interrogating controller, or an entity of an internet protocol multimedia core network subsystem, the receiving comprises receiving the registration request in the serving controller, and wherein the serving controller comprises a serving call session control function, receiving comprises receiving the registration request in the interrogating controller, and

wherein the interrogating controller comprises an interrogating call session control function.

In a similar field of endeavor, Herrero discloses a method and system for handling multiple registration. Herrero further discloses wherein said receiving comprises receiving the registration request in at least one of a serving controller, an interrogating controller, or an entity of an internet protocol multimedia core network subsystem [0072, 0073, 0075 and 0078]; the receiving comprises receiving the registration request in the serving controller, and wherein the serving controller comprises a serving call session control function [0078 and 0079], receiving comprises receiving the registration request in the interrogating controller, and wherein the interrogating controller comprises an interrogating call session control function [0075].

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Sonti and Lamb according to Herrero to allow for a simplified signaling flow of a registration process [0072].

Regarding Claim 30, the combination of Sonti and Lamb discloses the communication system according to claim 25 as described above.

However, the combination fails to disclose wherein a serving controller comprises the storing unit.

Herrero discloses wherein a serving controller comprises the storing unit [0079].

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify Sonti and Lamb according to Herrero to provide a simple, faster and convenient registration process.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sobti et al., U.S. Patent No. 5,553,315 discloses a method of maintaining access authorization using a bulletin board communication resource.

Sanmugam, U.S. Patent No. 5,978,669 discloses a method of detecting fraud in a radio communications network by analyzing activity, identification of RF channel data for mobile stations in the network.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shantell Portis whose telephone number is 571-272-0886. The examiner can normally be reached on Monday-Friday 7:00am-3:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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*WLP*

Slp

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